UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/726,087	12/02/2003	Young-Ky Kim	678-0245 CON	3399

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EXAMINER
LIM, STEVEN

ART UNIT	PAPER NUMBER
2617	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<table>
<tr><td rowspan="2">Office Action Summary</td><td>Application No.
10/726,087</td><td>Applicant(s)
KIM ET AL.</td></tr>
<tr><td>Examiner
STEVEN LIM</td><td>Art Unit
2617</td><td></td></tr>
</table>

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>09 November 2009</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-23 and 28-30</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-8,10-21,23 and 28-30</u> is/are rejected.

7)☐ Claim(s) <u>9 and 22</u> is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

1.   In view of the Appeal Brief filed on 11/9/2009, PROSECUTION IS HEREBY

REOPENED. A new ground of rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the

following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply

under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed

by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and

appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth

in 37 CFR 41.20 have been increased since they were previously paid, then appellant

must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by

signing below:

/LESTER KINCAID/

Supervisory Patent Examiner, Art Unit 2617.

Claim Rejections - 35 USC § 102

2.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3.   Claims 11-14 are rejected under 35 U.S.C. 102(b) as being anticipated by

Procter et al. (US 5440542).

4.   Regarding Claim 11, Procter et al. discloses a data transmission method in a

wireless communication system, comprising the steps of: encoding first input data of a

first bit stream to generate a first frame message having a first frame length (L3 sends

to L2 control information to the XCDR where control information consists of two frames,

Col. 4, Lines 26-31, Fig. 2B, Items 21 and 22); encoding second input data of a second

bit stream longer than said first bit stream to generate a second frame message having

a second frame length longer than said first frame length (data in the form of user

information is sent using IWF from PSTN to XCDR where the user information consists

of multiple frames, Col. 4, Lines 11-47, fig. 2A, Items 20-23 and fig. 2B, Items 19-20 and

23-25, Frames A-F); replacing a portion of the second frame message (user information

consisting of frames A-F) with the first frame message (XCDR transcodes all

information and substitutes user information with control information, Col. 3, Line 45-

Col. 4, Line 2, Col. 4, Lines 26-59); and transmitting the first frame message in place of

the replaced portion of the second frame message (Frames B, C, and D are placed in a

FIFO buffer while two frames of signaling information or control information are inserted

into the forward transmission stream after Frame A, Fig. 2A and 2B, Col. 4, Lines 2-47).

5.   Regarding Claim 12, Procter et al. further discloses the first frame message and

the second frame message are multiplexed when the first frame message is generated

during transmission of the second frame message (user information is replaces with

control data when necessary, Col. 4, Lines 26-47).

6.   Regarding Claim 13, Procter et al. further discloses a portion of the second frame

message, the first frame message and a remaining portion of the second frame

message are intermixingly output in sequence, in said replacing step (user information

is transmitted followed by signaling frame which is control information and then

remaining user data, Col. 4, Lines 15-47, Fig. 2B and 2C).

7.   Regarding Claim 14, Procter et al. further discloses the first frame message and

the second frame message from which a portion corresponding to the first frame

message is deleted, are intermixingly output in sequence, in said replacing step

(signaling frame or control information is placed in the forward transmission stream

followed by the remaining user data, Col. 4, Lines 15-47, Fig. 2B and 2C).

Claim Rejections - 35 USC § 103

8.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

9.   The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

1.   Determining the scope and contents of the prior art.
2.   Ascertaining the differences between the prior art and the claims at issue.
3.   Resolving the level of ordinary skill in the pertinent art.
4.   Considering objective evidence present in the application indicating
        obviousness or nonobviousness.

10.   Claims 1-4, 10 and 23 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Procter et al. (US 5440542) in view of Nagatani et al. (US 6097714).

11.   Regarding Claim 1, Procter et al. discloses a transmission device for a wireless

communication system, comprising: a first message generator for encoding first input

data of a first bit stream to generate a first frame message having a first frame length

(L3 sends to L2 control information to the XCDR where control information consists of

two frames, Col. 4, Lines 26-31, Fig. 2B, Items 21 and 22); a second message

generator for encoding second input data of a second bit stream longer than the first bit

stream to generate a second frame message having a second frame length longer than

the first frame length (data in the form of user information is sent using IWF from PSTN

to XCDR where the user information consists of multiple frames, Col. 4, Lines 11-47, fig.

2A, Items 20-23 and fig. 2B, Items 19-20 and 23-25, Frames A-F); a multiplexer for

replacing a portion of the second frame message with the first frame message (XCDR

transcodes all information and substitutes user information with control information, Col.

3, Line 45- Col. 4, Line 2, Col. 4, Lines 26-59); however Procter et al. fails to discloses a

spreader for spreading an output of the multiplexer.

12.   In an analogous art, Nagatani et al. discloses a spreader for spreading an output

of the multiplexer (spreading circuit spreads output of serial to parallel converter, Fig.

23, Items 22 and 23, Col. 3, Line 46 – Col. 4, Line 8), which enables introduction of a pn

code.

13.   It would have been obvious to one having ordinary skill in the art at the time of

invention was made to include a spreader at the output of the multiplexer in order to

allow for the introduction of pn codes and short codes which are standard in a spread

spectrum communication system.

14.   Regarding Claim 2, Procter et al. further discloses the first frame message and

the second frame message are multiplexed when the first frame message is generated

during transmission of the second frame message (user information is replaces with

control data when necessary, Col. 4, Lines 26-47).

15.   Regarding Claim 3, Procter et al. further discloses the multiplexer intermixingly

outputs, in sequence, a portion of the second frame message, the replaced first frame

message and a remaining portion of the second frame message (user information is

transmitted followed by signaling frame which is control information and then remaining

user data, Col. 4, Lines 15-47, Fig. 2B and 2C).

16.   Regarding Claim 4, Procter et al. further discloses the multiplexer intermixingly

outputs, in sequence, the replaced first frame message and the second frame message

from which a portion corresponding to the first frame message is deleted (signaling

frame or control information is placed in the forward transmission stream followed by the

remaining user data, Col. 4, Lines 15-47, Fig. 2B and 2C).

17.   Regarding Claim 10, Procter et al. further discloses a multiplexer however

Procter et al. fails to disclose a spreader comprising: an orthogonal code spreader for

spreading the frame message output from the multiplexer with an orthogonal code for a

dedicated control channel; and a pseudo-random noise (PN) spreader for spreading an

output of the orthogonal code spreader with a PN sequence.

18.   In an analogous art, Nagatani et al. discloses a spreader comprising: an

orthogonal code spreader for spreading the frame message output from the multiplexer

with an orthogonal code for a dedicated control channel; and a pseudo-random noise

(PN) spreader for spreading an output of the orthogonal code spreader with a PN

sequence, Fig. 23, Items 23, 23a and 23b, Col. 4, Lines 14-26), which enables standard

modulation techniques in a spread spectrum communication system.

19.   It would have been obvious to one having ordinary skill in the art at the time of

invention was made to use PN code and orthogonal code in order to utilize standard

modulation techniques in a spread spectrum communication system.

20.   Regarding Claim 23, Procter et al. further discloses a multiplexer however

Procter et al. fails to disclose a spreader comprising: an orthogonal code spreader for

spreading the frame message output from the multiplexer with an orthogonal code for a

dedicated control channel; and a pseudo-random noise (PN) spreader for spreading an

output of the orthogonal code spreader with a PN sequence.

21.   In an analogous art, Nagatani et al. discloses a spreader comprising: an

orthogonal code spreader for spreading the frame message output from the multiplexer

with an orthogonal code for a dedicated control channel; and a pseudo-random noise

(PN) spreader for spreading an output of the orthogonal code spreader with a PN

sequence, Fig. 23, Items 23, 23a and 23b, Col. 4, Lines 14-26), which enables standard

modulation techniques in a spread spectrum communication system.

22.   It would have been obvious to one having ordinary skill in the art at the time of

invention was made to use PN code and orthogonal code in order to utilize standard

modulation techniques in a spread spectrum communication system.

23.   Claims 5, 7, 8, and 28 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Procter et al. (US 5440542) and Nagatani et al. (US 6097714), and

further in view of Odenwalder et al. (US 5909434).

24.   Regarding Claim 5, Procter et al. further discloses sending control information for

power control (Col. 4, Lines 26-47) however Procter et al. fails to disclose a power

controller for increasing a transmission power of the remaining portion of the second

frame message, following the replaced first frame message, to be higher than that of the

first frame message.

25.   In an analogous art, Odenwalder et al. discloses a power controller for increasing

a transmission power of the remaining portion of the second frame message, following

the replaced first frame message, to be higher than that of the first frame message (Col.

13, Lines 5-15, Fig. 2, Item 44), which enables the receiver to maintain an appropriate

channel quality.

26.   It would have been obvious to one having ordinary skill in the art at the time of

invention was made to include a power controller for increasing a transmission power of

the remaining portion of the second frame message in order to allow the receiver to

maintain an appropriate channel quality.

27.   Regarding Claims 7 and 8, Procter et al. further discloses a second frame

message generator (data in the form of user information is sent using IWF from PSTN

to XCDR where the user information consists of multiple frames, Col. 4, Lines 11-47, fig.

2A, Items 20-23 and fig. 2B, Items 19-20 and 23-25, Frames A-F) however Procter et al.

fails to disclose the second frame message generator comprises: a cyclic redundancy

check (CRC) generator for generating CRC bits according to the second input data of

the second frame length; a tail bit generator for generating tail bits and adding the

generated tail bits to an output of the CRC generator; a channel encoder for encoding

the tail bit-added second frame data at a predefined coding rate; and an interleaver for

interleaving the encoded frame message by the second frame length and the interleaver

uniformly distributing symbols generated by encoding one data bit over the respective

durations of the whole frame.

28.   In an analogous art, Odenwalder et al. discloses a second frame generator

comprises a CRC generator for generating CRC bits according to the second input data

of the second frame length (Col.3, Lines 31-34, Fig. 2, Item 32), a tail bit generator for

generating tail bits and adding the generated tail bits to an output of the CRC generator

(Col. 3, Lines 33-39, Fig. 2, Item 34), a channel encoder for encoding the tail bit added

second frame data at a predefined coding rate (Col. 3, Lines 42-52, Fig. 2, Item 36), and

an interleaver for interleaving the encoded frame message by the second frame length

(Col. 3, Lines 59-62, Fig. 2, Item 42), the interleaver uniformly distributing symbols

generated by encoding one data bit over the respective durations of the whole frame (Col. 3, Lines 59-62), which enables error correction.

29.   It would have been obvious to one having ordinary skill in the art at the time of invention was made to include a CRC generator, tail bit generator, channel encoder, and interleaver in order to allow the receiver to check for errors in receiving the data.

30.   Regarding Claim 28, Procter et al. further discloses sending control information for power control (Col. 4, Lines 26-47) however Procter et al. fails to disclose a power controller for increasing a transmission power of the remaining portion of the second frame message, following the replaced first frame message, to be higher than that of the first frame message.

31.   In an analogous art, Odenwalder et al. discloses a power controller for increasing a transmission power of the remaining portion of the second frame message, following the replaced first frame message, to be higher than that of the first frame message (Col. 13, Lines 5-15, Fig. 2, Item 44), which enables the receiver to maintain an appropriate channel quality.

32.   It would have been obvious to one having ordinary skill in the art at the time of invention was made to include a power controller for increasing a transmission power of the remaining portion of the second frame message in order to allow the receiver to maintain an appropriate channel quality.

33.   Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Procter et al. (US 5440542) and Nagatani et al. (US 6097714), and further in view of Examiner's Official Notice.

34.   Regarding Claim 6, Procter et al. further discloses a first frame message and second frame message having a length (frames are equal to an amount of time, Col. 4, Lines 26-47), however Procter et al. fails to disclose the first frame message has a frame length of 5ms and the second frame message has a frame length of 20ms.

35.   Examiner takes official notice that it is well known in the art that a frame can have any length and frame messages can be of variable length depending on the protocol implemented.

36.   It would have been obvious to one having ordinary skill in the art at the time of invention was made to use a 5ms and 20ms length for the frame messages in order to comply with protocols which implement a 5ms control message and 20ms user information message.

37.   Claims 15, 20, 21, and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Procter et al. (US 5440542) in view of Odenwalder et al. (US 5909434).

38.   Regarding Claim 15, Procter et al. further discloses sending control information for power control (Col. 4, Lines 26-47) however Procter et al. fails to disclose a power controller for increasing a transmission power of the remaining portion of the second

frame message, following the replaced first frame message, to be higher than that of the

first frame message.

39.   In an analogous art, Odenwalder et al. discloses a power controller for increasing

a transmission power of the remaining portion of the second frame message, following

the replaced first frame message, to be higher than that of the first frame message (Col.

13, Lines 5-15, Fig. 2, Item 44), which enables the receiver to maintain an appropriate

channel quality.

40.   It would have been obvious to one having ordinary skill in the art at the time of

invention was made to include a power controller for increasing a transmission power of

the remaining portion of the second frame message in order to allow the receiver to

maintain an appropriate channel quality.

41.   Regarding Claims 20 and 21, Procter et al. further discloses a second frame

message generator (data in the form of user information is sent using IWF from PSTN

to XCDR where the user information consists of multiple frames, Col. 4, Lines 11-47, fig.

2A, Items 20-23 and fig. 2B, Items 19-20 and 23-25, Frames A-F) however Procter et al.

fails to disclose the second frame message generator comprises: a cyclic redundancy

check (CRC) generator for generating CRC bits according to the second input data of

the second frame length; a tail bit generator for generating tail bits and adding the

generated tail bits to an output of the CRC generator; a channel encoder for encoding

the tail bit-added second frame data at a predefined coding rate; and an interleaver for

interleaving the encoded frame message by the second frame length and the interleaver

uniformly distributing symbols generated by encoding one data bit over the respective

durations of the whole frame.

42.   In an analogous art, Odenwalder et al. discloses a second frame generator

comprises a CRC generator for generating CRC bits according to the second input data

of the second frame length (Col.3, Lines 31-34, Fig. 2, Item 32), a tail bit generator for

generating tail bits and adding the generated tail bits to an output of the CRC generator

(Col. 3, Lines 33-39, Fig. 2, Item 34), a channel encoder for encoding the tail bit added

second frame data at a predefined coding rate (Col. 3, Lines 42-52, Fig. 2, Item 36), and

an interleaver for interleaving the encoded frame message by the second frame length

(Col. 3, Lines 59-62, Fig. 2, Item 42), the interleaver uniformly distributing symbols

generated by encoding one data bit over the respective durations of the whole frame

(Col. 3, Lines 59-62), which enables error correction.

43.   It would have been obvious to one having ordinary skill in the art at the time of

invention was made to include a CRC generator, tail bit generator, channel encoder,

and interleaver in order to allow the receiver to check for errors in receiving the data.

44.   Regarding Claim 29, Procter et al. further discloses sending control information

for power control (Col. 4, Lines 26-47) however Procter et al. fails to disclose a power

controller for increasing a transmission power of the remaining portion of the second

frame message, following the replaced first frame message, to be higher than that of the

first frame message.

45.   In an analogous art, Odenwalder et al. discloses a power controller for increasing

a transmission power of the remaining portion of the second frame message, following

the replaced first frame message, to be higher than that of the first frame message (Col. 13, Lines 5-15, Fig. 2, Item 44), which enables the receiver to maintain an appropriate channel quality.

46.   It would have been obvious to one having ordinary skill in the art at the time of invention was made to include a power controller for increasing a transmission power of the remaining portion of the second frame message in order to allow the receiver to maintain an appropriate channel quality.

47.   Claims 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Procter et al. (US 5440542) in view of Examiner's Official Notice.

48.   Regarding Claim 16, Procter et al. further discloses a first frame message and second frame message having a length (frames are equal to an amount of time, Col. 4, Lines 26-47), however Procter et al. fails to disclose the first frame message has a frame length of 5ms and the second frame message has a frame length of 20ms.

49.   Examiner takes official notice that it is well known in the art that a frame can have any length and frame messages can be of variable length depending on the protocol implemented.

50.   It would have been obvious to one having ordinary skill in the art at the time of invention was made to use a 5ms and 20ms length for the frame messages in order to comply with protocols which implement a 5ms control message and 20ms user information message.

51.   Regarding Claim 17, Procter et al. further discloses a portion of the second frame message is deleted (placed into a buffer) to insert the first frame message into the deleted portion for a second duration, and the remaining portion of the second frame message is output for third and fourth durations, in said replacing step (Col. 4, Lines 15-47) .

52.   Regarding Claim 18, Procter et al. further discloses a portion of the second frame message is deleted (placed into a buffer) to insert the first frame message in the deleted portion for a first duration, and the remaining portion of the second frame message is output for second, third and fourth durations, in said replacing step (Col. 4, Lines 15-47).

53.   Claims 19 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Procter et al. (US 5440542) in view of Examiner's Official Notice and further in view of Odenwalder et al. (US 5909434).

54.   Regarding Claim 19, Procter et al. further discloses sending control information for power control (Col. 4, Lines 26-47) however Procter et al. fails to disclose a power controller for increasing a transmission power of the remaining portion of the second frame message, following the replaced first frame message, to be higher than that of the first frame message.

55.   In an analogous art, Odenwalder et al. discloses a power controller for increasing a transmission power of the remaining portion of the second frame message, following the replaced first frame message, to be higher than that of the first frame message (Col.

13, Lines 5-15, Fig. 2, Item 44), which enables the receiver to maintain an appropriate channel quality.

56.   It would have been obvious to one having ordinary skill in the art at the time of invention was made to include a power controller for increasing a transmission power of the remaining portion of the second frame message in order to allow the receiver to maintain an appropriate channel quality.

57.   Regarding Claim 30, Procter et al. further discloses sending control information for power control (Col. 4, Lines 26-47) however Procter et al. fails to disclose a power controller for increasing a transmission power of the remaining portion of the second frame message, following the replaced first frame message, to be higher than that of the first frame message.

58.   In an analogous art, Odenwalder et al. discloses a power controller for increasing a transmission power of the remaining portion of the second frame message, following the replaced first frame message, to be higher than that of the first frame message (Col. 13, Lines 5-15, Fig. 2, Item 44), which enables the receiver to maintain an appropriate channel quality.

59.   It would have been obvious to one having ordinary skill in the art at the time of invention was made to include a power controller for increasing a transmission power of the remaining portion of the second frame message in order to allow the receiver to maintain an appropriate channel quality.

Response to Arguments

60.   Applicant's arguments with respect to claims 1-23 and 28-30 have been

considered but are moot in view of the new ground(s) of rejection.

Allowable Subject Matter

61.   Claims 9 and 22 are objected to as being dependent upon a rejected base claim,

but would be allowable if rewritten in independent form including all of the limitations of

the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to STEVEN LIM whose telephone number is (571)270-

1210. The examiner can normally be reached on Mon-Thurs 9:00am-4:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Lester Kincaid can be reached on (571)272-7922. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/S. L./
Examiner, Art Unit 2617

/LESTER KINCAID/
Supervisory Patent Examiner, Art Unit 2617